

STERILIZER INCLUDING AIR PURGING SYSTEM AND PRESSURE ACTUATED DOOR SEAL

Abstract of the Disclosure

A sterilizer including a sterilization chamber for receiving articles to be sterilized and a door supported on a horizontal pivot at an access opening of the sterilizer chamber. The door includes a seal plate and a resilient seal member supported on the seal plate wherein the seal member includes an annular lip extending transversely to the plane of the seal plate. The lip extends into the sterilizer chamber wherein pressure within the chamber exerts a force biasing an opposing surface of the lip into engagement with an inner surface of the chamber. The sterilizer door is movable between a fully closed and a fully open position and includes a mechanism for holding the door in a partially open position. In the partially open position, the lip extends into contact with a surface of the sterilizer chamber to thereby form a bridge between the door and chamber and prevent condensation from dripping down away from the chamber and door. A controller is provided for controlling sterilization cycles and actuates the door to move to the partially open position at the end of a sterilization cycle. In addition, a pressure actuated lock is provided for preventing the door from opening when the chamber is pressurized. The controller further automatically controls purging of air from the sterilizer chamber during a steam generation mode of a sterilization cycle wherein the controller senses the temperature and pressure during the sterilization cycle, and in response thereto, opens a purge valve to release air when the conditions within the sterilizer deviate by a predetermined amount from preset conditions monitored by the controller.